

In the Claims:

Please amend Claims 1, 4, 6-9; 12, 14-17, 20, and 22-24; cancel Claims 2, 5, 10, 13, 18, and 21; and add Claims 25-30 as shown below. Applicant respectfully reserves the right to prosecute any originally presented claims in a continuing or future application.

1. (Currently Amended) A system for communicating information about server resources between servers in a cluster, comprising:

a server cluster having a plurality of cluster members servers, including a first ~~server~~ cluster member and a second ~~server~~ cluster member;

a set of resources or services on said first ~~server~~ cluster member that ~~[[may]]~~ can be used by other ~~servers~~ members in the cluster; ~~[[and,]]~~

wherein said first ~~server~~ cluster member sends an advertisement of its services to other ~~servers in the cluster~~ members,

wherein if said second ~~server~~ cluster member determines ~~[[it]]~~ said second cluster member is out of synchronization with said first ~~server~~ cluster member, or missed an advertisement, said second ~~server~~ cluster member makes a Hypertext Transfer Protocol (HTTP) point-to-point request to said first ~~server~~ cluster member requesting ~~[[any]]~~ the advertisements ~~missed; missed, and,~~

wherein said first ~~server~~ cluster member responds to said HTTP point-to-point request by sending a HTTP point-to-point response including an update of said first cluster member's Java Naming and Directory Interface (JNDI) tree ~~updated information~~ to said second ~~server~~ cluster member.

2. (Canceled)

3. (Original) The system of claim 1 wherein each member of the cluster receives the advertisement, but those members who do not need to be updated ignore the advertisement.

4. (Currently Amended) The system of claim 1 wherein a third cluster member server may be is newly added to the cluster, and wherein said third cluster member server waits for advertisements from said plurality of cluster members and then makes HTTP point-to-point requests to each cluster member server requesting advertisements [[it]] said third cluster member missed from that particular cluster member server.

5. (Canceled)

6. (Currently Amended) The system of claim 1 [[5]] wherein the determination as to whether the first-second cluster member server is out of synchronization with said first cluster member server, or missed an advertisement, is made by determining that the first cluster member's server's JNDI tree is out of synchronization with the second cluster member's server's JNDI tree.

7. (Currently Amended) The system of claim 6 wherein the receipt of updated information at said second cluster member server is used to synchronize [[its]] said second cluster member's internal JNDI tree with the resources provided at said first server cluster member.

8. (Currently Amended) The system of claim 5 wherein as part of the advertisement the first cluster member server packages a JNDI update of all [[if]] of its services and multicasts the package to all cluster members.

9. (Currently Amended) A method of communicating information about server resources between servers in a cluster, comprising the steps of:

providing a server cluster including a first cluster member server and a second cluster member server, and resources operating thereon;

sending an advertisement from said first cluster member server to other cluster members servers in the cluster announcing the resources or services on said first cluster member server;

subsequently, if said second cluster member server determines ~~[[it]]~~ said second cluster member is out of synchronization with said first cluster member server, or missed an advertisement, making a Hypertext Transfer Protocol (HTTP) point-to-point request from said second cluster member server to said first cluster member server requesting ~~[[any]]~~ the advertisements missed; ~~[[and,]]~~

receiving a HTTP point-to-point response including an update of said first cluster member's Java Naming and Directory Interface (JNDI) tree ~~updated information~~ from said first cluster member server at said second cluster member server and updating said second cluster member server accordingly.

10. (Canceled)

11. (Original) The method of claim 9 wherein each member of the cluster receives the advertisement, but those members who do not need to be updated ignore the advertisement.

12. (Currently Amended) The method of claim 9 wherein a third cluster member server ~~may be~~ is newly added to the cluster, and wherein said third cluster member server waits for advertisements from other cluster members and then makes HTTP point-to-point requests to each cluster member server requesting advertisements ~~[[it]]~~ said third cluster member missed from that particular cluster member server.

13. (Canceled)

14. (Currently Amended) The method of claim 9 ~~[[13]]~~ wherein the determination as to whether the ~~first~~ second cluster member server is out of synchronization with said first cluster member server, or missed an advertisement, is made by determining that the first cluster member's server's JNDI tree is out of synchronization with the second cluster member's server's JNDI tree.

15. (Currently Amended) The method of claim 14 wherein the receipt of updated information at said second cluster member server is used to synchronize ~~[[its]]~~ said second cluster member's internal JNDI tree with the resources provided at said first cluster member server.

16. (Currently Amended) The system of claim 9 wherein as part of the advertisement the first cluster member server packages a JNDI update of all if its services and multicasts the package to all cluster members.

17. (Currently Amended) A computer readable medium including instructions stored thereon which when executed cause ~~[[the]]~~ a computer or computers to perform the steps of :

providing a server cluster including a first cluster member server and a second cluster member server, and resources operating thereon;

sending an advertisement from said first cluster member server to other members servers in the cluster announcing the resources on said first cluster member server;

subsequently, if said second cluster member server determines ~~[[it]]~~ said second cluster member is out of synchronization with said first cluster member server, or missed an advertisement, making a Hypertext Transfer Protocol (HTTP) point-to-point request from said second cluster member server to said first cluster member server requesting ~~[[any]]~~ the advertisements missed; and,

receiving a HTTP point-to-point response including an update of said first cluster member's Java Naming and Directory Interface (JNDI) tree ~~updated information~~ from said first cluster member server at said second cluster member server and updating said second cluster member server accordingly.

18. (Canceled)

19. (Original) The computer readable medium of claim 17 wherein each member of the cluster receives the advertisement, but those members who do not need to be updated ignore the advertisement.

20. (Currently Amended) The computer readable medium of claim 17 wherein a third cluster member is server may be newly added to the cluster, and wherein said third cluster member server waits for advertisements from other cluster members and then makes HTTP point-to-point requests to each cluster member server requesting advertisements [[it]] said third cluster member missed from that particular cluster member server.

21. (Canceled)

22. (Currently Amended) The computer readable medium of claim 17 [[21]] wherein the determination as to whether the first second cluster member server is out of synchronization with said first cluster member server, or missed an advertisement, is made by determining that the first cluster member's server's JNDI tree is out of synchronization with the second cluster member's server's JNDI tree.

23. (Currently Amended) The computer readable medium of claim 22 wherein the receipt of updated information at said second cluster member server is used to synchronize [[its]] said second cluster member's internal JNDI tree with the resources provided at said first cluster member server.

24. (Currently Amended) The computer readable medium of claim 17 wherein as part of the advertisement the first cluster member server packages a JNDI update of all if its services and multicasts the package to all cluster members.

25. (New) The system of claim 1 wherein a third cluster member is newly added to the server cluster, and wherein said third cluster member waits for advertisements from said plurality of cluster members and then makes a HTTP point-to-point request to a single cluster member requesting a statedump from said single cluster member.

26. (New) The method of claim 9 wherein a third cluster member is newly added to the server cluster, and wherein said third cluster member waits for advertisements from other

cluster members and then makes a HTTP point-to-point request to a single cluster member requesting a statedump from said single cluster member.

27. (New) The computer readable medium of claim 1 wherein a third cluster member is newly added to the server cluster, and wherein said third cluster member waits for advertisements from other cluster members and then makes a HTTP point-to-point request to a single cluster member requesting a statedump from said single cluster member.

28. (New) The system of claim 1 wherein making a HTTP point-to-point request comprises opening a communication socket, sending the HTTP point-to-point request, and closing the communication socket.

29. (New) The method of claim 9 wherein making a HTTP point-to-point request comprises opening a communication socket, sending the HTTP point-to-point request, and closing the communication socket.

30. (New) The computer readable medium of claim 17 wherein making a HTTP point-to-point request comprises opening a communication socket, sending the HTTP point-to-point request, and closing the communication socket.